

REMARKS

This Amendment is in response to the Office Action of July 3, 2006. The Office Action indicated that Claims 1-16 were pending and rejected. The Action was made FINAL. With this Amendment, Claims 1, 12 are amended, and Claims 1-16 are presented for reconsideration and allowance.

Examiner's Response to Arguments

The Examiner suggested (in paragraph 12 of the Office Action) that the recitation "which experiences a hot spot during a short circuit" was not given patentable weight because the recitation occurred in the preamble. With this Amendment, Claims 1 and 12 are amended to move such recitation from the preambles to the bodies of the claims. This amendment moves language from the preamble to the body of the claim and is believed to not raise any new technical issues, and is believed to put the application in better condition for allowance or appeal. Applicant respectfully requests reconsideration and allowance of Claims 1 and 12 (and the claims that depend from Claims 1 and 12) with the limitation in the bodies of Claims 1 and 12 as presently amended.

The Examiner suggested that "it is well known in the art that during a short circuit, an electrical energy storage cell will experience a hot spot at the location of the short circuit." While this suggestion may (or may not) be the case, it is not germane to the invention as presently claimed in Claims 1-16 and is not germane to the problem solved by the invention as presently claimed in Claims 1-16. The applicant does not disclose a hot spot "at the location of the short circuit" as suggested by the Examiner. Instead, the applicant discloses a hot spot on an electrical storage cell that occurs when the electrical storage cell is connected to a short circuit that is external to the storage cell. The hot spot is on the storage cell, but the short circuit is at a different location in an external circuit that is not in the storage cell. As disclosed in applicant's specification at page 7, lines 14-17, "During short circuit testing, the protective device 70 can be bridged (temporarily short circuited) to simulate a fault condition." Applicant therefore respectfully requests reconsideration and allowance of Claims 1 and 12 as presently amended.

The Examiner suggests (on pages 7-8 of the Office Action) that the structure in Oweiss is the same as the structure as presently claimed and could therefore perform the same functions as

the structure as presently claimed, even though Oweiss does not explicitly mention the functions. The structure in Oweiss, however, is not the same as the presently claimed structures. Oweiss discloses layers of metal foil and low conductivity material in a vacuum. Each of applicant's independent claims 1, 9 and 12 includes layers "in a combustible atmosphere". Oweiss does not disclose layers in a combustible atmosphere as presently claimed in independent claims 1, 9 and 12. A vacuum is not a combustible atmosphere. The Examiner suggests that "the same goes for Lee et al. and Moores et al.," however Lee et al. and Moores et al. also do not disclose layers in a combustible atmosphere. The Claims 1, 9, 12 include limitations to a combustible atmosphere, and this element is lacking from Oweiss, Lee et al. and Moores et al. For these reasons, applicant respectfully request reconsideration and allowance of Claims 1, 9 and 12 and the claims that depend therefrom.

Claims 1, 2, 4, 12 and 13 were rejected under 35 USC 102 over Oweiss et al. Oweiss et al., as explained above, does not disclose a combustible atmosphere as presently claimed in independent Claims 1 and 12. Oweiss et al. does not disclose a hot spot on a storage cell due to a short circuit in an external circuit. Applicant therefore requests withdrawal of the rejections under 35 USC 102 and allowance of Claims 1, 2, 4, 12 and 13.

Claims 1-16 were rejected under 35 USC 103 over various combinations of Oweiss et al., Lee et al., Moores et al., Rouillard et al., Dansui et al., Oosaki et al., Bechtold et al. and Miller et al. None of these references cited, taken singly or in combination, teach or suggest a storage cell with a hot spot when a short circuit occurs in an external circuit as presently claimed in Claims 1-16. None of the references cited, taken singly or in combination, teach or suggest a combustible atmosphere or providing a first layer of thermally conductive material and a second layer of thermally insulating material to lower a surface temperature to a temperature that is lower than a temperature that can cause combustion in a combustible atmosphere. Applicant therefore requests withdrawal of the rejections under 35 USC 103 and allowance of Claims 1-16.


For the reasons stated above, applicant respectfully requests reconsideration of the rejections under 35 USC 102 and 35 USC 103, and allowance of Claims 1-16.

The Application appears to be in condition for allowance, and favorable action is

requested. The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By: 

David C. Bohn, Reg. No. 32,015
900 Second Avenue South, Suite 1400
Minneapolis, Minnesota 55402-3319
Phone: (612) 334-3222 Fax: (612) 334-3312